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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,566	01/28/2004	Masafumi Nishitani	Q79620	8137

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EXAMINER

PASSANITI, SEBASTIANO

ART UNIT	PAPER NUMBER
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3711

DATE MAILED: 02/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/765,566	Applicant(s) NISHITANI ET AL.	
	Examiner Sebastiano Passaniti	Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on see detailed Office action.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office action is responsive to communication received 09/07/2005 –
Amendment.

Claims 1-13 remain pending.

Claim 3 remains withdrawn from further consideration.

The examiner in charge of this application has been changed. Updated
correspondence information may be found at the end of this Office action.

Following is an action on the MERITS:

The indicated allowability of claim 5 has been withdrawn in view the newly
presented rejection based upon Tsuchida (5,255,913, of record). Rejections based on
the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102 and 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that
form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public
use or on sale in this country, more than one year prior to the date of application for patent in the United
States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set
forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, 9, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuang (2005/0159243). As to claim 1, note front housing (20) including face portion (21). Chuang further includes a back portion or rear (23) and a middle portion (30). The material of the middle member (30) comprises a nonmetallic composite, which clearly exhibits a lower longitudinal elastic modulus and lower specific gravity than the material of the front and rear bodies. As to claim 4, Figures 3 and 4 show, in cross-section, that the material of the middle body is thinner than the material of the front and rear bodies. As to claim 7, Figures 1 and 2 clearly show that the middle body includes a portion of the crown as well as the side portion of the head. As to claim 9, the crown or middle portion of the head clearly takes up at least 5% of the surface area of the head. As to claims 12 and 13, the material of the middle body is at least 80% as thick as the material of the front and rear bodies and it is clear that the material of the middle body is about 90-95% as thick as the material of the front and rear bodies, as evidenced through a review of Figures 3 and 4.

Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchida ('913). Figures 1 and 3 clearly show a front body including a face (2), a rear body (3) and a middle body (5). Note, the front, back and middle bodies, as claimed, need not be separate and distinct portions of the head. Any portion of the head may be a "body", as broadly as claimed.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuchida ('913). Although Tsuchida lacks a specific disclosure of the thicknesses for each of the

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front, back and middle bodies, as required by claim 5, one of ordinary skill in the art would have found it obvious to have modified the Tsuchida device to include appropriate dimensions based upon the type of material used for each of the body sections and further based upon the amount of desired flexure or elastic deformation in the crown surface (middle body). Here, the applicant has only disclosed the claimed dimensions as preferred, without emphasizing any criticality with respect to the various thickness parameters. The skilled artisan would have known how changing the thickness of distinct portions of the club head body would have affected the performance of the club head, given that Tsuchida already recognizes that the rigidity of the head, for example, is dependent upon the elastic modulus of the material being used (col. 2, lines 44-51).

Claims 1, 2, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang (2005/0026719). As to claims 1 and 2, Figure 5 clearly shows three sections including a front body including a face portion (16), a middle body (18) and a rear body (22). While the embodiment shown by Yang incorporates the same material for the middle and rear bodies of the head. As Yang is concerned with desirably locating the center of gravity, Yang further details that other materials may be employed, so long as the overall criteria with respect to club head weight, size and mass distribution are maintained. See paragraphs [0021, 0022]. One of ordinary skill in the art would have found it obvious to select any combination of suitable materials for the various portions of the head in order to provide a desirable location for the center of gravity. As to claim 6, the middle portion clearly includes a portion of the sole, sides and crown of the head.

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As to claim 8, the middle body takes up at least 8% of the outer surface area of the head.

Claims 1, 10 and 11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Mules (708,575). Under §102, Mules shows a front body comprising a striking surface (a), a middle body (b) and a rear body (not numbered). The middle body is made of an elastic material, while the front body is made of metal. It would appear from the drawings that the rear body is fabricated from wood. Clearly, the middle body includes a lower longitudinal elastic modulus and lower specific gravity than the material of either the front or rear bodies. Specific to claims 10 and 11, note Figure 2 showing an inverted triangular shape for the middle body, wherein the middle body is wider at the crown than at the sole. Alternatively, and under §103, while the Mules patent does not specifically detail the properties of the materials used in each of the front, middle and rear portions of the club head, the skilled artisan would have found it obvious to select suitable materials based upon the amount of resiliency required, as Mules selects materials that will provide specific responses from the striking plate (i.e., resilience) so that the trajectory of a struck ball may be adjusted.

Claim Objections

Claims 1, 2, 4, 5, 10 and 11 are objected to because of the following informalities:

As to claim 1, lines 7 and 8, --the-- should precede each occurrence of the term "material".

As to claim 2, line 6, --a-- should precede the term "melt".

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As to claim 4, line 6, --and-- should follow "portion".

As to claim 5, line 6, --and-- should follow "portion" and in lines 10-12, --a-- should follow each instance of the term "has".

As to claim 10, line 2, each of the instances of "near" should read --nearer-- .

As to claim 11, line 1, "where in" should read --wherein-- .

Appropriate correction is required.

Further References of Interest

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See Figure 3 in Mattern. Note Figure 2 in Chen. See Figure 2 in Onoda.

Response to Arguments

Applicant's arguments with respect to claims 1,2 and 4-13 have been considered but are moot in view of the new ground(s) of rejection.

Response to Amendment

The first line of the amendment and under the section styles **REMARKS**, the applicant indicates that claims 1, 2 and 4-7 remain pending. Clarification is requested, as it would appear that claim 1-13 remain ending, with claim 3 standing withdrawn from further consideration.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sebastiano Passaniti whose telephone number is 571-

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272-4413. The examiner can normally be reached on Monday through Friday (6:30AM - 3:00PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eugene L. Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

S.Passaniti/sp
February 15, 2006


Sebastiano Passaniti
Primary Examiner